APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,684	12/31/2003	George Fitzmaurice	1500.1088	1977

21171   7590   03/16/2007
STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER
SHERMAN, STEPHEN G

ART UNIT	PAPER NUMBER
2629	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

> A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
> - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
> - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
> - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
>   Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>08 February 2007</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-35</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-35</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>24 June 2004</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   This office action is in response to the amendment filed the 8 February 2007.

Claims 1-35 are pending.

Response to Arguments

2.   Applicant's arguments with respect to claims 1-15, 17-21, 23-25 and 27-28 have

been considered but are moot in view of the new ground(s) of rejection.

3.   Applicant's arguments filed with respect to claim 26 have been fully considered

but they are not persuasive.

The applicant argues on page 9, lines 1-11 the rejection under 35 USC 102(b) as

being anticipated by Ono. The applicant argues that Ono discusses the arc of the hand

when making a stroke but does not layout the menu items themselves in an arc, but

rather that if you draw a line through the corners of the menu item boxes in Figure 6 of

Ono a straight line is formed. The examiner respectfully disagrees. Claim 26 only

states: "laying out a graphical user interface to conform to the arc." The claim does not

require the controls to actually be in an "arc shape" as asserted by the applicant. Since

the menu items of Ono are arranged along the arc, Ono "lays out" the interface to

conform to the arc. Therefore, Ono anticipates claim 26.

Allowable Subject Matter

4.   The indicated allowability of claims 16 and 22 is withdrawn in view of the newly

discovered reference(s) to Anderson et al. and Keely, JR et al. Rejections based on the

newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6.   Claims 1-21, 23, 25 and 29-35 are rejected under 35 U.S.C. 102(b) as being

anticipated by Anderson et al. (US 5,828360).

Regarding claim 1, Anderson et al. disclose a display, comprising:

an arc shaped control zone for a function of an interface (Figures 5a and 5b

show the disc menu 53 which is an arc shaped control zone.); and

an arc shaped interface element graphic aligned with the arc shaped control

zone (Figures 5a and 5b show that the disc menu 53 has an arc, while Figure 3 shows

that the menu comprises interface elements 31a through 31h which are arranged in an

arc shape around the control zone.) and indicating the function (Figure 3 shows that

every interface element 31a-31h indicated the function of the element, i.e. scan, send

call, etc.)

with the arc shaped interface graphic and the arc shaped control zone aligned to

a natural user motion (Figures 2a and 2b show that the shape of the interface menu

allows for a natural motion of a user to be used.).

Regarding claim 2, Anderson et al. disclose a display as recited in claim 1,

wherein the alignment orients the graphic and zone with the motion (Figures 2a and 2b

show the menu is aligned with a motion of a user, as explained above.).

Regarding claim 3, Anderson et al. disclose a display as recited in claim 1,

wherein the alignment follows the natural user motion (Figures 2a and 2b show the

menu is aligned with a motion of a user, as explained above.).

Regarding claim 4, Anderson et al. disclose a display as recited in claim 1,

wherein the alignment positions the graphic and zone at a location accessible via the

natural user motion (Figures 2a and 2b show the menu is aligned with a motion of a

user, as explained above.).

Regarding claim 5, Anderson et al. disclose a display as recited in claim 1,

wherein the natural user motion comprises a curve determined by a stroke of the user

on the display (Figures 2a and 2b show the menu is aligned with a motion of a user, as

explained above.).

Regarding claim 6, Anderson et al. disclose a display as recited in claim 5,

wherein the curve includes natural motion variations (Figures 2a and 2b show the menu

is aligned with a motion of a user, as explained above, where variations between a left

handed and right handed person may be taken into account as explained in Figures 4a

and 4b.).

Regarding claim 7, Anderson et al. disclose a display as recited in claim 1,

wherein the user natural motion stroke comprises one of an elbow motion curve, a wrist

motion curve, a finger motion curve, a shoulder motion curve and a combination of two

or more of the curves (Please refer to the explanation above, and furthermore the

examiner understands that if a user control the mouse using their wrist, then the motion

curve will be based on this.).

Regarding claim 8, Anderson et al. disclose a display as recited in claim 7,

wherein the curve is a curve determined by a single user (Figure 2a and 2b show that

there is only a single user using the menu and therefore the curve is only based upon

one user.).

Regarding claim 9, Anderson et al. disclose a display as recited in claim 1,

further comprising an interface location at which the zone and graphic are positioned

(Figures 5a and 5b shows that an interface location is where the zone and graphic are

positioned.).

Regarding claim 10, Anderson et al. disclose a display as recited in claim 9,

wherein the interface location is specified by a cursor positioned by the user (Figures 5a

and 5b show that the menu is located based upon where the cursor 54 is positioned.).

Regarding claim 11, Anderson et al. disclose a graphical user interface,

comprising:

a cursor positioned on a display by a user at a location (Figures 5a and 5b show

a cursor 54 at a location specified by a user.); and

a function control positioned on the display responsive to the location of the

cursor (Figures 5a and 5b show that the menu 53 is positioned on the display 50 based

on the position of the cursor 54.),

having an arc shaped interface graphic indicating a function of the control

(Figures 5a and 5b show that the disc menu 53 has an arc, while Figure 3 shows that

the menu comprises interface elements 31a through 31h which are arranged in an arc

shape around the control zone. Figure 3 shows that every interface element 31a-31h

indicated the function of the element, i.e. scan, send call, etc.) and having an arc shape

conforming to a motion arc of a hand caused by motion of an arm about an elbow of the

user (Figures 2a and 2b show that the shape of the interface menu allows for a natural

motion of a user to be used.).

Regarding claim 12, Anderson et al. disclose an interface as recited in claim 11,

wherein the control comprises plural controls and the controls are aligned along the arc

(Figures 3, 5a and 5b show that there are plural controls 31a-31h that are aligned

around the arc.).

Regarding claim 13, Anderson et al. disclose an interface as recited in claim 12,

wherein a default control is positioned under the cursor at a particular instance (Figure 3

shows that the controls 31a-31h, which are default controls to the menu, can be

positioned under the cursor at a particular instance in which a user moves the cursor

over the control.).

Regarding claim 14, Anderson et al. disclose an interface as recited in claim 12,

wherein the controls can be one of re-oriented and moved (Figures 5a and 5b show that

the menu can be moved.).

Regarding claim 15, Anderson et al. disclose an interface as recited in claim 12,

wherein the controls are one of oriented and shaped to conform to a wrist arc caused by

a hand moving about a wrist of the user (Figures 2a, 2b and 3 show that the controls

are oriented to conform to the arc made by a user moving their wrist.).

Regarding claim 16, Anderson et al. disclose a graphical user interface,

comprising:

a cursor positioned on a display by a user at a location (Figures 5a and 5b show

a cursor 54 at a location specified by a user.); and

a function control positioned on the display responsive to the location of the

cursor (Figures 5a and 5b show that the menu 53 is positioned on the display 50 based

on the position of the cursor 54.),

having a interface graphic indicating a function of the control (Figures 5a and 5b

show that the disc menu 53 has an arc, while Figure 3 shows that the menu comprises

interface elements 31a through 31h which are arranged in an arc shape around the

control zone. Figure 3 shows that every interface element 31a-31h indicated the

function of the element, i.e. scan, send call, etc.) and

having an arc shape conforming to a motion arc of a hand caused by motion of

an arm about an elbow of the user (Figures 2a and 2b show that the shape of the

interface menu allows for a natural motion of a user to be used.),

wherein the control comprises plural controls and the controls are aligned along

an arc intersecting the motion arc at 90 degrees (Figure 3 shows plural controls 31a-

31h, and these controls all intersect the motion arc at 90 degrees.).

Regarding claim 17, Anderson et al. disclose an interface as recited in claim 11,

wherein the control comprises plural controls (Figure 3, controls 31a-31h.) and the

shape of the sides of each of the controls is one of rectilinear, arc shaped, wedge

shaped and triangular shaped (Figures 3 and 8 show that each of the controls can be

characterized as being rectilinear, arc shaped, wedge shaped and triangular shaped.).

Regarding claim 18, Anderson et al. disclose an interface as recited in claim 11,

further comprising an overflow interface positioned responsive to the motion arc (Figure

3 shows overflow interface 32 which is positioned responsive to the motion arc.).

Regarding claim 19, Anderson et al. disclose an interface as recited in claim 11,

wherein text of the control is rectilinear aligned with a display (Figures 3, 5a and 5b

show that the text of the control such as Send, Call and ABC are rectilinear with a

display.).

Regarding claim 20, Anderson et al. disclose an interface as recited in claim 19,

wherein the overflow interface is natural motion arc shaped (Figure 3.).

Regarding claim 21, Anderson et al. disclose an interface as recited in claim 12,

wherein the control is oriented to an extended arc (Figure 3 shows that the arc is

"extended" into a circular shape.).

Regarding claims 23 and 25, Anderson et al. disclose a method and a

computer readable storage for controlling a computer, comprising:

determining a position of a cursor as designated by the user (Figures 5a and 5b

show that the position of the cursor 54 is determined on the screen.), and

positioning an arc shaped graphical user interface responsive to the position

where the arc of the shape is defined by a natural user motion (Figures 5a and 5b show

that the position of the arc shaped menu interface 53 is responsive to the position of the

cursor 54. Figures 2a and 2b show that the shape of the interface menu allows for a

natural motion of a user to be used.).

Regarding claim 29, Anderson et al. disclose an apparatus, comprising:

a display (Figure 1, item 11)); and

a computer producing an arc shaped graphical user interface on the display

where the arc of the shape is defined by a natural user motion (Figure 1 and column 4,

lines 41-63 and Figures 2a, 2b and 3 show that the graphical user interface on the

display 11 in defined by a natural user motion.).

Regarding claim 30, Anderson et al. disclose a display, comprising:

a control zone for a function of an interface (Figures 5a and 5b show the disc

menu 53 which is an arc shaped control zone.); and

an interface element graphic aligned with the control zone and indicating the

function (Figures 5a and 5b show that the disc menu 53 has an arc, while Figure 3

shows that the menu comprises interface elements 31a through 31h which are arranged

in an arc shape around the control zone. Figure 3 shows that every interface element

31a-31h indicated the function of the element, i.e. scan, send call, etc.)

with the interface graphic and control zone aligned to a natural user motion of an

elbow motion (Figures 2a and 2b show that the shape of the interface menu allows for a

natural motion of a user to be used, where this natural motion shown can be produced

by moving a user's hand relative to the elbow thus making the arc shape.).

Regarding claim 31, Anderson et al. disclose a display as recited in claim 30,

wherein the user natural motion stroke comprises one of an a wrist motion curve, a

finger motion curve and a shoulder motion in combination with the elbow motion (The

examiner understands that if the elbow is moving then the wrist is moving, therefore the

user motion stroke would comprise the wrist in combination with the elbow.).

Regarding claim 32, Anderson et al. disclose a display, comprising:

a control zone for a function of an interface (Figures 5a and 5b show the disc

menu 53 which is an arc shaped control zone.); and

an interface element graphic aligned with the control zone and indicating the

function (Figures 5a and 5b show that the disc menu 53 has an arc, while Figure 3

shows that the menu comprises interface elements 31a through 31h which are arranged

in an arc shape around the control zone. Figure 3 shows that every interface element

31a-31h indicated the function of the element, i.e. scan, send call, etc.)

with the interface graphic and control zone aligned to a natural user motion of a

finger motion (Figures 2a and 2b show that the shape of the interface menu allows for a

natural motion of a user to be used, where this natural motion shown is produced by

moving a user's fingers, i.e. the fingers move from Figure 2a to 2b.).

Regarding claim 33, Anderson et al. disclose a display as recited in claim 32,

wherein the user natural motion stroke comprises one of an elbow motion curve, a wrist

motion curve and a shoulder motion curve in combination with the finger motion

(Figures 2a and 2b show that the fingers and the wrist moves, therefore the motion

stroke is based on a combination of these two motions.).

Regarding claim 34, Anderson et al. disclose a display, comprising:

a control zone for a function of an interface (Figures 5a and 5b show the disc

menu 53 which is an arc shaped control zone.); and

an interface element graphic aligned with the control zone and indicating the

function (Figures 5a and 5b show that the disc menu 53 has an arc, while Figure 3

shows that the menu comprises interface elements 31a through 31h which are arranged

in an arc shape around the control zone. Figure 3 shows that every interface element

31a-31h indicated the function of the element, i.e. scan, send call, etc.)

with the interface graphic and control zone aligned to a natural user motion of a

shoulder motion (Figures 2a and 2b show that the shape of the interface menu allows

for a natural motion of a user to be used, where this natural motion shown can be

produced by moving a user's hand relative to the shoulder thus making the arc shape.).

Regarding claim 35, Anderson et al. disclose a display as recited in claim 34,

wherein the user natural motion stroke comprises one of an elbow motion curve, a wrist

motion curve and a finger motion curve in combination with the shoulder motion (The

examiner understands that if the shoulder is moving then the wrist is moving, therefore

the user motion stroke would comprise the wrist in combination with the shoulder.).

7.   Claim 26 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by

Ono et al. (US 5,559,944).

Regarding claim 26, Ono teaches a method, comprising:

allowing a user to make strokes with an input device (Fig. 7);

determining an arc from the strokes (Fig. 7); and

laying out a graphical user interface to conform to the arc (see col. 3, lines 16-

24).

Regarding claim 28, Ono et al. disclose a method as recited in claim 26,

wherein plural users are allowed to make strokes individually at different times and the

arc is determined from the strokes of the plural users (Column 3, lines 16-24 explain

that each individual, i.e. plural users, make arcs and then the arc the menu is obtained

by using these strokes.).

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9.   The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.
4.   Considering objective evidence present in the application indicating obviousness or nonobviousness.

10.   Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Anderson et al. (US 5,828360) in view of Ono et al. (US 5,559,944).

Regarding claim 24, Anderson et al. disclose a method as recited in claim 20.

Anderson et al. fail to teach the method further comprising determining whether the user has specified a custom arc and positioning one of a custom and standard arc shaped interface responsive to the determination.

Ono et al. disclose a method further comprising determining whether the user has specified a custom arc (Column 3, lines 16-24) and positioning one of a custom and standard arc shaped interface responsive to the determination (Column 3, lines 16-24, where the custom arc shaped interface is positioned.).

Therefore, it would have been obvious to "one of ordinary skill" in the art at the time the invention was made to make the arc shaped interface taught by Anderson et al. have a user customized arc shaped as taught by Ono et al. in order to allow for a user to use the interface without causing an unnatural force.

11.   Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ono et al. (US 5,559,944) in view of Anderson et al. (US 5,828360).

Regarding claim 27, Ono et al. disclose a method as recited in claim 26.

Ono et al. fail to teach the method further comprising: determining a position of a cursor specified by the user; and positioning the interface responsive to the position; and allowing the user to activate a function of the interface.

Anderson et al. disclose a method comprising:

determining a position of a cursor specified by the user (Figures 5a and 5b show that the position of the cursor 54 is determined on the screen.); and

positioning the interface responsive to the position (Figures 5a and 5b show that

the position of the arc shaped menu interface 53 is responsive to the position of the

cursor 54.); and

allowing the user to activate a function of the interface (Figures 3, 5aand 5b show

that the user can use the cursor to activate one of the items 31 on the interface.).

Therefore it would have been obvious to "one of ordinary skill" in the art at the

time the invention was made to use the interface positioning method taught by

Anderson et al. with the method taught by Ono et al. in order to produce the menu in the

area where the user is operating allowing for the use to use hand movements that the

user can make and remember easily.

12.   Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Anderson et al. (US 5,828360) in view of Keely, JR et al. (US 2006/0136840)

Regarding claim 22, Anderson et al. disclose a graphical user interface for a

tablet personal computer having a stylus input system, comprising:

a cursor positioned on a display by a user at a location on the display designed

by the stylus (Figures 5a and 5b show a cursor 54 at a location specified by a user.

Figure 1 shows that the input can be made by a stylus 14, see also Figure 6.);

a function control positioned on the display responsive to the location of the

cursor (Figures 5a and 5b show that the position of the arc shaped menu interface 53 is

responsive to the position of the cursor 54.),

having a interface graphic indicating a function of the control (Figures 5a and 5b show that the disc menu 53 has an arc, while Figure 3 shows that the menu comprises interface elements 31a through 31h which are arranged in an arc shape around the control zone. Figure 3 shows that every interface element 31a-31h indicated the function of the element, i.e. scan, send call, etc.) and

having a graphic shape and position conforming to a natural motion arc of a hand caused by motion of an arm about an elbow and of the hand moving about a wrist of the user (Figures 2a and 2b show that the shape of the interface menu allows for a natural motion of a user to be used, where this natural motion shown can be produced by moving a user's hand relative to the elbow thus making the arc shape. The examiner understands that if the elbow is moving then the wrist is moving, therefore the user motion stroke would comprise the wrist in combination with the elbow.),

having plural controls with a default control positioned under the cursor (Figure 3 shows that the controls 31a-31h, which are default controls to the menu, can be positioned under the cursor at a particular instance in which a user moves the cursor over the control.), controls aligned along the arc (Figure 3 shows items 31a-31h aligned with the arc.) and

an overflow interface and shaped positioned responsive to the motion arc (Figure 3 shows overflow interface 32 which is positioned responsive to the motion arc.).

Anderson et al. fails to teach controls aligned along a counter arc intersecting the motion arc at 90 degrees and where the controls are shaped responsive to the natural motion arc with natural variations.

Keely, JR et al. disclose of a pop-up menu that is aligned along an arc with respect to a central default control wherein the controls are shaped responsive to the natural motion with natural variations (Figures 10-12 show the pop-up menu responsive to the selection of the color control, where the controls 132, 134, 136, 138 and 140 are aligned around an arc that is responsive to a natural motion of a user which depends on whether a use is right handed or left handed, i.e. it is based upon natural variations.).

Therefore it would have been obvious to "one of ordinary skill" in the art at the time the invention was made to use the pop-up circular menu taught by Keely JR, et al. with the interface taught by Anderson et al. such that when one of the controls 31a-31h are selected an arc shaped menu pops-up, making the two arcs therefore intersect at a 90 degrees angle, in order to allow for the user's hand not to block the user's view of the selections.

Conclusion

9.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Golibrodski et al. (US 2004/0189724), Selker (US 2002/0122072), Leavitt et al. (Us 6,918,091) and Kurtenbach (US 5,689,667) disclose user interfaces that are arc shaped with controls conformed around the arc.

10.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Stephen G. Sherman whose telephone number is (571)

272-2941. The examiner can normally be reached on M-F, 8:00 a.m. - 4:30 p.m..

   If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

   Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SS

13 March 2007   AMR A. AWAD
                                            SUPERVISORY PATENT EXAMINER